

**Amendments to the Claims:**

Please amend the claims as follows. Amend claims 17, 20, 42 and 44-54 and add new dependent claims 56-58. This listing of the claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-16 (canceled)

Claim 17 (currently amended): A method for the inhibition of transmission of a hepatitis B virus to a cell, comprising contacting the virus, in the presence of the cell, with an effective concentration of a peptide having the formula:

X-PLLVLQAGFFLLTRILTIPQLDSLWWTSLNFLGGTTVCLGQNSQSP-Z;  
X-PLLVLQAGFFLLTRILTIPQLDSLWWTSLNFLGGTTVCLGQNSQSP-Z;  
X-PLLVLQAGFFLLTRILTIPQLDSLWWTSLNFLGGT-Z;  
X-LLVLQAGFFLLTRILTIPQLDSLWWTSLNFLGGTT-Z;  
X-LVLQAGFFLLTRILTIPQLDSLWWTSLNFLGGTTV-Z;  
X-LQAGFFLLTRILTIPQLDSLWWTSLNFLGGTTVCL-Q-Z;  
X-QAGFFLLTRILTIPQLDSLWWTSLNFLGGTTVCLG-Z;  
X-AGFFLLTRILTIPQLDSLWWTSLNFLGGTTVCLGQ-Z;  
X-GFFLLTRILTIPQLDSLWWTSLNFLGGTTVCLGQN-Z;  
X-FFLLTRILTIPQLDSLWWTSLNFLGGTTVCLGQNS-Z;  
X-FLLTRILTIPQLDSLWWTSLNFLGGTTVCLGQNSQ-Z;  
X-LLTRILTIPQLDSLWWTSLNFLGGTTVCLGQNSQS-Z;  
X-PGYRWMCLRRFIIFLFILLCLIFLLVLLDYQGMLPVCPPLIPGSSTSTGCRTCMTT-Z;  
X-PGYRWMCLRRFIIFLFILLCLIFLLVLLDYQGMLPVCPPLIPGSSTSTGPCRTCMTT-Z;  
X-PGYRWMCLRRFIIFLFILLCLIFLLVLLDYQGML-Z;  
X-GYRWMCRRFIIFLFILLCLIFLLVLLDYQGMLP-Z;  
X-YRWMCLRRFIIFLFILLCLIFLLVLLDYQGMLPV-Z;  
X-RWMCLRRFIIFLFILLCLIFLLVLLDYQGMLPVC-Z;  
X-WMCLRRFIIFLFILLCLIFLLVLLDYQGMLPVCP-Z;  
X-MCLRRFIIFLFILLCLIFLLVLLDYQGMLPVCP-I-Z;  
X-CLRRFIIFLFILLCLIFLLVLLDYQGMLPVCP-I-Z;  
X-LRRFIIFLFILLCLIFLLVLLDYQGMLPVCP-PI-Z;  
X-RRFIIFLFILLCLIFLLVLLDYQGMLPVCP-PIPG-Z;  
X-RFIIFLFILLCLIFLLVLLDYQGMLPVCP-PIPGS-Z;  
X-FIIFLFILLCLIFLLVLLDYQGMLPVCP-PIGSS-Z;  
X-FIIFLFILLCLIFLLVLLDYQGMLPVCP-PIPGSS-Z;

X-IIFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSST-Z;  
X-IFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTS-Z;  
X-FLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTZ;  
X-LFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTG-Z;  
X-FILLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTGP-Z;  
X-ILLCIFLLVLLDYQGMLPVCPLIPGSSTSTGPC-Z;  
X-LLCIFLLVLLDYQGMLPVCPLIPGSSTSTGPCR-Z;  
X-LLCLIFLLVLLDYQGMLPVCPLIPGSSTSTGPCRT-Z;  
X-LCLIFLLVLLDYQGMLPVCPLIPGSSTSTGPCRTC-Z;  
X-CLIFLLVLLDYQGMLPVCPLIPGSSTSTGPCRTCM-Z;  
X-LIFLLVLLDYQGMLPVCPLIPGSSTSTGPCRTCMT-Z; or  
X-IFLLVLLDYQGMLPVCPLIPGSSTSTGPCRTCTM-Z;  
X-IFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTT-Z;  
X-FLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTS-Z;  
X-LFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTZ;  
X-FILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTG-Z;  
X-ILLCIFLLVLLDYQGMLPVCPLIPGSSTTSTGP-Z;  
X-LLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPC-Z;  
X-LCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRT-Z;  
X-CLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTC-Z;  
X-LIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTCM-Z; or  
X-IFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTCTM-Z;

(SEQ ID NOS: 239-273, respectively)

in which:

amino acid residues are presented by the single-letter code;

X comprises an amino group, an acetyl group, a 9-fluorenylmethoxy-carbonyl group, a hydrophobic group, or a macromolecule carrier group;

Z comprises a carboxyl group, an amido group, a hydrophobic group, or a macromolecular carrier group for an effective period of time so that ~~no~~ infection of the cell by the virus ~~occurs~~ is inhibited.

Claims 18-19 (canceled)

Claim 20 (currently amended):      The method of Claim 17 wherein the peptide has the formula

X-PLLVLQAGFFLLTRILTIHQSLDSWWTSNLNFLGGGTTVCLGQNSQSP-Z

Application No. 08/487,355  
Rule 312 Amendment of December 31, 2003  
Reply to October 1, 2003 Notice of Allowance

(SEQ ID NO: 239)

X-PLLVLQAGFFLLTRILTIPQLSDSWWTSLNFLGGTTVCLGQNSQSP-Z

(SEQ ID NO: 239).

Claim 21 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-PLLVLQAGFFLLTRILTIPQLSDSWWTSLNFLGGT-Z (SEQ ID NO: 240).

Claim 22 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-LLVLQAGFFLLTRILTIPQLSDSWWTSLNFLGGT-Z (SEQ ID NO: 241).

Claim 23 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-LVLQAGFFLLTRILTIPQLSDSWWTSLNFLGGTT-Z (SEQ ID NO: 242).

Claim 24 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-LQAGFFLLTRILTIPQLSDSWWTSLNGLGGTTVCL-Z (SEQ ID NO: 243).

Claims 25-32 (canceled)

Claim 33 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-GYRWMCLRRFIIFLFILLLCLIFLLVLLDYQGMLP-Z (SEQ ID NO: 252).

Claim 34 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-YRWMCLRRFIIFLFILLLCLIFLLVLLDYQGMLPV-Z (SEQ ID NO: 253).

Application No. 08/487,355  
Rule 312 Amendment of December 31, 2003  
Reply to October 1, 2003 Notice of Allowance

Claim 35 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-RWMCLRRFIIFLFILLLCLIFLLVLLDYQGMLPVC-Z (SEQ ID NO: 254).

Claim 36 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-WMCLRRFIIFLFILLLCLIFLLVLLDYQGMLPVCP-Z (SEQ ID NO: 255).

Claim 37 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-MCLRRFIIFLFILLLCLIFLLVLLDYQGMLPVCPI-Z (SEQ ID NO: 256).

Claim 38 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-CLRRFIIFLFILLLCLIFLLVLLDYQGMLPVCPLI-Z (SEQ ID NO: 257).

Claim 39 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-LRRFIIFLFILLLCLIFLLVLLDYQGMLPVCPLIP-Z (SEQ ID NO: 258).

Claim 40 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-RRFIIFLFILLLCLIFLLVLLDYQGMLPVCPLIPG-Z (SEQ ID NO: 259).

Claim 41 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-RFIIFLFILLLCLIFLLVLLDYQGMLPVCPLIPGS-Z (SEQ ID NO: 260).

Claim 42 (currently amended): The method of Claim 17 wherein the peptide has the formula

Application No. 08/487,355  
Rule 312 Amendment of December 31, 2003  
Reply to October 1, 2003 Notice of Allowance

~~X-FHFLFILLLCLIFLLVLLDYQGMLPVCPLIGGSS-Z (SEQ ID NO: 261)~~  
X-FIIFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSS-Z (SEQ ID NO: 261).

Claim 43 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-IIFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSST-Z (SEQ ID NO: 262).

Claim 44 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-IFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTS-Z (SEQ ID NO: 263)~~  
X-IFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTT-Z (SEQ ID NO: 263).

Claim 45 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-FLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTST-Z (SEQ ID NO: 264)~~  
X-FLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTS-Z (SEQ ID NO: 264).

Claim 46 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-LFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTG-Z (SEQ ID NO: 265)~~  
X-LFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTST-Z (SEQ ID NO: 265).

Claim 47 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-FILLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTGP-Z (SEQ ID NO: 266)~~  
X-FILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTG-Z (SEQ ID NO: 266).

Claim 48 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-ILLLCIFLLVLLDYQGMLPVCPLIPGSSTSTGPC-Z (SEQ ID NO: 267)~~

Application No. 08/487,355  
Rule 312 Amendment of December 31, 2003  
Reply to October 1, 2003 Notice of Allowance

X-ILLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGP-Z (SEQ ID NO: 267).

Claim 49 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-LLLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCR-Z (SEQ ID NO: 268)~~

X-LLLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPC-Z (SEQ ID NO: 268).

Claim 50 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-LCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRT-Z (SEQ ID NO: 269)~~

X-LCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCR-Z (SEQ ID NO: 269).

Claim 51 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-LCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTC-Z (SEQ ID NO: 270)~~

X-LCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRT-Z (SEQ ID NO: 270).

Claim 52 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-CLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTCM-Z (SEQ ID NO: 271)~~

X-CLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTC-Z (SEQ ID NO: 271).

Claim 53 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-LIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTCMT-Z (SEQ ID NO: 272)~~

X-LIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTCM-Z (SEQ ID NO: 272).

Claim 54 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-IFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTCMTT-Z (SEQ ID NO: 273)~~

Application No. 08/487,355  
Rule 312 Amendment of December 31, 2003  
Reply to October 1, 2003 Notice of Allowance

X-IFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTCMT-Z (SEQ ID NO: 273).

Claim 55 (previously presented): The method of Claim 17 wherein X is an acetyl group, and Z is an amido group.

Claim 56 (new) The method of Claim 17 wherein the peptide has at least one amino acid substitution, wherein a first amino acid residue is substituted for a second, different amino acid residue.

Claim 57 (new) The method of Claim 56, further wherein the amino acid substitution is a conserved substitution.

Claim 58 (new) The method of Claim 56, further wherein the amino acid substitution is a non-conserved substitution.